CLAIMS

- 1. A filter device for the depletion of the leukocyte content from blood products comprising:
- a porous element comprising at least one fibrous web having a pore size suitable for leukocyte removal,
- said web comprising fibres of a hydrophobic polymer coated with a hydrophilic polymer suitable to enhance the CWST of said hydrophobic polymer,

characterised in that said web further includes adsorbent particles having a mean diameter lower than 30 μm , said particles being bonded to said fibres by means of said hydrophilic polymer coating said fibres.

- 2. A filter device according to claim 1, wherein said web is obtainable by soaking (impregnating) a web of fibres of said hydrophobic polymer with a solution of said hydrophilic polymer including in suspension said adsorbent particles.
- 3. A filter device according to claim 2, wherein said solution comprises from 0.1 to 10% by wt. of said particles.
- 4. A filter device according to claim 1, wherein said hydrophilic coating polymer is selected from co-polymers obtained by polymerization of vinylacetate and vinylpyrrolidone.
- 5. A filter device according to any of claims 1 to 4, wherein said absorbent particles are made from a material selected from the group consisting of acrylic polymers, polyesters, polyamides, polyacrylamides, active charcoal and polystyrene-divinylbenzene.
- 6. A filter device according to any of claims 1 to 5, wherein said hydrophobic polymer is selected from the group consisting of polyethylene, polypropylene, cellulose acetate, polyamides, acrylic polymers, polyacrylonitriles, polyvi-

nylidene fluoride, polyaramides and polyesters, particularly polybutylenterephthalate.

- 7. A filter device according to any of claims 1 to 6, wherein said web comprises an amount of particles in the range from 0.01 to 0.5 g/g of the fibre web material.
- 8. A filter device according to any of claims 1 to 8 wherein the hydrophobic polymer is polibutylenterephthalate and the adsorbent particles are made of polyamide or polystyrene-divinylbenzene polymer and are bonded to the hydrophobic fibres by means of polyvinylpyrrolidone at least partially coating said fibres.
- 9. A method for removing substances from blood products comprising feeding said blood products through a filter according to any of claims 1 to 8.
- 10. A blood purification device comprising a filter according to any of claims 1 to 8.
- 11. A blood purification device according to claim 10 consisting of blood bag device for the separation of blood into leukocyte depleted blood components, comprising a first bag connected, in fluid flow communication, with a second bag through a filter according to any of claims 1 to 8.